

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (http://bmjopen.bmj.com).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open

Defining collective capability in Indigenist evaluation: a concept analysis protocol

Journal:	BMJ Open
Manuscript ID	bmjopen-2021-055304
Article Type:	Protocol
Date Submitted by the Author:	08-Jul-2021
Complete List of Authors:	Maher, Bobby; Australian National University College of Health and Medicine, Research School of Population Health Guthrie, Jillian; Australian National University, Research School of Population Health Sturgiss, Elizabeth; Monash University, School of Primary and Allied Health Care; The Australian National University, National Centre for Epidemiology and Population Health CARGO, Margaret; University of Canberra, Lovett, Raymond; Australian National University, National Centre for Epidemiology and Population Health, Research School of Population Health
Keywords:	PUBLIC HEALTH, QUALITATIVE RESEARCH, Health policy < HEALTH SERVICES ADMINISTRATION & MANAGEMENT

SCHOLARONE™ Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our licence.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which <u>Creative Commons</u> licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

Title:

Defining collective capability in Indigenist evaluation: a concept analysis protocol

Authors: Bobby Maher (Yamatji)¹, Jill Guthrie (Wiradjuri)¹, Elizabeth Sturgiss^{2,1}, Margaret Cargo³, Ray Lovett (Wongaibon, Ngiyampaa)¹

Corresponding author: Ms Bobby Maher

Address: 54 Mills Road, National Centre for Epidemiology and Population Health, Research

School of Population Health, The Australian National University, Acton ACT 2601

Email: bobby.maher@anu.edu.au

Phone: +61 2 6125 0621

Full name, department, institution, city and country of all co-authors.

National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, Acton, ACT, Australia

² School of Primary and Allied Health Care, Monash University, Frankston, VIC, Australia

³ Health Research Institute, Faculty of Health, University of Canberra, Bruce, ACT, Australia

ORCID

Bobby Maher: 0000-0002-7079
 Jill Guthrie: 0000-0001-5031-0910

Elizabeth Sturgiss: 0000-0003-4428-4060
 Margaret Cargo: 0000-0002-6466-7627
 Raymond Lovett: 0000-0002-8905-2135

Word count (excluding title page, abstract, references, figures and tables): 3,148

Tables: 2

Figures: 1

References: 42

ABSTRACT

Introduction: Indigenist evaluation has not been established in Australia; the premise of which is that evaluations are undertaken for Indigenous, by Indigenous and with Indigenous people. Exploring a collective capability approach could be one way to inform an Indigenist evaluation methodology. Collective capability suggests that a base of skills and knowledges exist, and when these assets come together, empowerment and agency emerge. However, collective capability is not clearly defined nor is it a common lexicon in population health or evaluation. Our aim is to develop and define the concept of collective capability in Indigenist evaluation in Australia from an Australian Indigenous standpoint. The study will draw on literature from Indigenous research internationally.

Methods and analysis: An adapted Rodgers' evolutionary concept analysis method will be used to clarify the meaning of collective capability, and to systematically review and synthesise the literature. We will adopt a 7-step process, rather than Rodgers' 5-step process. The adapted method includes qualitative interviews with Aboriginal and Torres Strait Islander knowledge holders to clarify the meaning of collective capability and inform appropriate terms for the search strategy, and a consensus process for the coding of the literature. We will then systematically collate, synthesise and analyse the literature. Where possible, we will also identify exemplars or models of collective capability from the literature.

Ethics and dissemination: This protocol provides a process to developing a concept, and will form the basis of a new framework and assessment tool for Indigenist evaluation practice. The concept analysis will establish definitions, characteristics and attributes of collective capability. Findings will be disseminated through a peer-reviewed journal, conference presentations, the project advisory group, the Thiitu Tharrmay reference group and Aboriginal and Torres Strait Islander community partners supporting the project.

KEYWORDS: Program Evaluation; Aboriginal and Torres Strait Islander; Collective Capability; Indigenous-led; Concept Analysis; Indigenist Evaluation

STRENGTHS AND LIMITATIONS OF THIS STUDY:

- This paper describes a protocol for defining collective capability within an Indigenist methodological context, and includes the investigator team being driven by Aboriginal researchers.
- In-depth interviews with Indigenous knowledge holders will occur in the first instance to inform the search terms and define collective capability from an Indigenous standpoint.
- The concept may be completely new and not fully established in the literature relating to the Australian evaluation context.
- The concept may not be internationally relevant.



INTRODUCTION

Reform in Indigenous evaluation practice is occurring in Australia; there is a call to action to better understand where progress is being made in Aboriginal and Torres Strait Islander health and social outcomes, and the effectiveness of programs, policies and services in supporting this progress. Evaluation practice is an important vehicle to make judgements on whether programs, policies or services are working or not working within a particular context.¹⁻³ Evaluations of programs, policies and services relevant to Indigenous people and communities are essential to establish an evidence base and an understanding of progress in health and social outcomes.^{2, 4, 5-7} There is however, little evidence through quality program evaluations to show what is working and what is not working, and how Aboriginal and Torres Strait Islander peoples benefit, implying that policies and programs are not working as well.^{4, 7-10} With limited and poor quality published evaluation evidence, there is a gap in knowledge and lessons learned.

The current Indigenous evaluation landscape in Australia has tended to be positioned in settler-colonialism and may be responsible for the current poor state of Indigenous evaluations in Australia. ^{7, 8, 11} Dominant settler-colonial approaches and perspectives applied to evaluation methodologies, engagement, design and methods becomes problematic for evaluations of Indigenous programs, policies and services within community settings as it often excludes local context, perspectives, experiences and knowledges. ^{2, 12, 13} Additionally, current practice commonly fails to address underlying power imbalances due to external evaluation teams who are often outsiders to communities. ^{2, 7} Indigenous cultures are highly contextual; context matters. ¹⁴ For Aboriginal and Torres Strait Islander people, this considers the diversity in culture, place, knowledge systems, lived experiences and lifeworlds. ¹⁵

As has been shown elsewhere in the world, Indigenist approaches applied to evaluation translates to evaluation that benefits Indigenous people; includes Indigenous people; and is guided by principles, practice and knowledges that are Indigenous. ¹⁶⁻¹⁸ Internationally, Indigenous evaluation has been defined and operationalised to be 'by Indigenous, for Indigenous, with Indigenous and as Indigenous'. ^{2, 16p.370, 17, 18} In Australia, we see some elements of Indigenist approaches integrated into evaluation practice and are often manifest as Indigenous governance, ^{7, 11} cultural protocols that inform ethical and respectful relationships with communities, ^{7, 12, 19} and processes and strategies for meaningful knowledge translation with communities. ^{3, 4, 7, 20} However, these are not features of standard evaluation practice.

There is a need to improve the quality and usefulness of program evaluations to strengthen the evidence base, with a focus on centering Indigenous perspectives, knowledge and priorities in evaluation practice.⁸ Further, to enhance Indigenous evaluation practice in Australia and move to Indigenist evaluation, new frameworks and models are required; that include governance, leadership and inclusion of Indigenous knowledge and perspectives. The approach of collective capability may contribute to the way forward, but the term is novel and made up of two concepts – collectivism and the capability approach.^{21, 22}

Indigenous societies are often described as 'collective' or 'collectivist', because the emphasis is on the group above individuals. The role of collectivism is a shared and relational intent; to determine the solutions of the issues that Indigenous peoples collectively define and identify.²³ In part, collectivism is strongly aligned with self-determination for Indigenous peoples.²⁴ Capability relates to the tools, skills and resources

that enhance the wellbeing of a person to live and lead a life that they value; thus gaining the freedom to do the things that align with these values.^{21, 22, 25, 26} Values often are context specific, relating to knowing, 'doing and being' that are intricately linked to Indigenous 'lifeworlds', and integrates knowledge, kinship structures and realities.¹⁵ Our working definition is that when collective and capability come together, it implies that the collective action of individuals and their capabilities results in decision making and participation processes and structures that benefit the 'collective'. This is the working definition that is the starting position for this work.

We aim to establish a collective capability definition and operational elements of collective capability within evaluation practice in Australia, and of potential relevance internationally, to inform Indigenist evaluation.

METHODS AND ANALYSIS

Methodology

Concept analysis has been used in nursing science to develop theory and models to inform clinical practice.²⁷ It has since been applied to a number of fields and disciplines including public health, social work and health policy.²⁸⁻³¹ The methodology is a systematic approach drawing from a combination of primary research literature and grey literature, and an analysis of these literatures to determine the characteristics and attributes of a concept that appears vague and ambiguous. A concept analysis can be used to establish meaning and clarity of the concept and has been described as 'the systematic examination of the attributes or characteristics of a given concept for the purpose of clarifying the meaning of that concept'.^{30p.1184}

Methods

Rodgers' evolutionary method

Rodgers' evolutionary concept analysis is a systematic and inductive method of analysis to clarify concepts that may be ambiguous and vague to inform knowledge that has mostly been applied in nursing.^{32, 33} A 5-step process is used to define, describe and explain a concept within the context in which it used. The steps include: (1) Identification of the concept, including the definition, associated terms, and relevant use; (2) Selection of the sample and setting of data collection; (3) Collection and analysis of data that identify the attributes, antecedents and consequences of the concept; (4) Exemplars of the concept (if appropriate); and (5) Identify implications for nursing and further research and development.²⁹ Rodgers' evolutionary method is cyclical in nature and acknowledges that concepts are continually evolving and changing. Therefore, the analysis will not necessarily determine an endpoint for a concept and may require further research to redefine the concept as it develops over time.³²

Aboriginal and Torres Strait Islander governance

Two governance structures will provide guidance and advice to the project. We will establish a Project Advisory Group (PAG) to inform and provide advice on the project approaches. Members will have expertise in Indigenous evaluation, community-based research methods and policy making. Additionally, Thiitu Tharrmay is an Aboriginal and Torres Strait Islander reference group that provides advice to parts of the research program at the Australian National University. In the Ngiyampaa language, 'thiitu tharrmay' means

'to share knowledge'. Thiitu Tharrmay membership includes experts in Indigenous health and community-based research, research methods and policy making.

Adapting Rodgers' method

Collective capability as a concept is not well defined and is not well established in the literature, therefore the concept is immature and requires development.³³ We will be adapting Rodgers' evolutionary method to address this issue, and will include a fieldwork component with knowledge holders to develop the concept from an Indigenous standpoint. Knowledge holders refers to Aboriginal and Torres Strait Islander peoples who have expertise in evaluation, Indigenous research methods and community-based research.³⁴ We will start with in-depth qualitative interviews (Step 1, see figure 1) with knowledge holders to draw out how collective capability is described; establish a definition; and explain how it is operationalised in Indigenist evaluation practice in Australia.³⁵ Associated terms, ategy of the . characteristics and attributes will also be identified in the interviews; these will then be used to inform the search strategy of the literature.

Figure 1. Process of adapted Rodgers' evolutionary concept analysis



Implementing the 7-steps of the concept analysis of the literature

- 1. Qualitative interviews and conventional content analysis. A purposive method of sampling will be undertaken to recruit Aboriginal and Torres Strait Islander knowledge holders. This includes advice and recommendations from the PAG; the Australian Evaluation Society (AES) Awards for Excellence winners; and professional networks of the investigator team. After being recruited by the primary investigator, a series of questions will be asked including:
 - a. Can I ask you why you said yes to this interview?
 - b. What words come to mind when you hear the word evaluation?
 - i. What do you think Indigenous evaluation is?
 - ii. Probing questions: Can you tell me a bit more about your experience (term, or the words the participant has mentioned)
 - c. What is important in Indigenous evaluation?
 - d. What does the word collective mean to you?
 - i. Probing question: What other words represent collective?
 - ii. Probing question: How would you explain collective to other people?
 - e. What words come to mind when you hear the word capability?
 - i. Probing question: What other words represent capability?
 - ii. Probing question: How would you explain capability to other people?
 - f. If we brought the words collective and capability together, how would you explain collective capability to other people?
 - i. Probing question: What other words would you use to explain collective capability?
 - ii. Probing question: I've bought along these images along today, do any of these resonate collective capability, and can you tell me why? (there will be approximately six abstract images. No identifying of people or places)
 - g. How would you explain collective capability in Indigenous evaluation?
 - i. Probing question: Do you think it happens now in Indigenous evaluation?
 - ii. Probing question: What would you see if collective capability was applied to Indigenous evaluation?
 - iii. Probing question: How would things be different if collective capability was happening now, like you described?

Analysis of interview data will be conducted using conventional content analysis drawing on the knowledge holders lived experience and knowledge of the concept collective capability. ³⁶ An inductive approach will also be applied to analyse the data to find meaning from the content of text through consolidating and organising the text, and to identify associated terms, characteristics (including the antecedents and consequences of the characteristics) and attributes to describe collective capability.³⁷

2. The content analysis results will be used as the search terms to inform the search strategy. The search strategy will involve an iterative process drawing on the associated terms identified in the qualitative interviews with knowledge holders. We will use the associated terms to inform the search terms. This may include or extend the search terms listed in Box 1 which were identified by the research team.

Box 1. Example search terms

Indigenous OR "First Nation" OR "First People" OR Aboriginal OR "Torres Strait" OR Maori OR "Native American" OR "American Indian" OR "Native Hawaiian" OR, "Alaska Native" OR metis OR inuit OR sami

Capability, capacity, self-determination, sovereignty, control, ownership, decision-making, Indigenous-led (this may be covered by the other terms)

Community, community-based, co-design

Evaluation, program monitoring, accountability

Boolean terms: Collective AND Capability building

Terms identified from Step 1 content analysis

Additionally, we will draw on the discussions of how collective capability has been described in the interview data to establish the characteristics and attributes of collective capability in Indigenist evaluation. This may include patterns or themes from the analysis of the data and will inform the inclusion/exclusion criteria of the search strategy.

Inclusion

Literature that describes collective capability as per findings from the qualitative interviews and/or describes its characteristics will be considered for inclusion. Particular focus will be on Indigenous evaluation practices and how the concept is applied to evaluation design, methodology and methods. We will include Indigenous specific and universal programs that target Indigenous populations.

We are interested in evaluation design, methodology and methods that include participatory approaches. We will also include study designs that include experimental or clinical trials.

There may be different theories that define the concept of collective capability within other contexts/disciplines, it will be important to include the theoretical context that applies to Indigenous self-determination, agency and participation. Therefore, theoretical materials (commentaries, conceptual writing, think pieces) will be included as well as empirical literature (research studies and review articles). Theoretical material from community development and health promotion that describes theories, frameworks and/or models where the concept is a component will be considered.

Exclusion

Articles in languages other than English will not be included. We will exclude program evaluations of universal programs where the focus is not on Indigenous peoples or communities.

The following electronic databases will be searched for relevant literatures: Applied Social Sciences Index and Abstracts; Scopus; Google Scholar; Google; Informit Indigenous collection; ProQuest Dissertations; and PubMed. We will also include grey literature, in

particular government evaluation reports, commissioned evaluation reports, dissertations and evaluation workshops and conference material.

3. The search

Two Aboriginal team members will independently assess titles and abstracts of relevant articles and literature, and remove any duplicates. Searching and screening will occur concurrently, and we will use the COVIDENCE software for title/abstract screening, full-text screening, quality assessment, and data extraction.³⁸ Results from the search strategy will be screened and search terms reviewed based on citations selected for inclusion. A second search will occur with revised terms and repeat the screening. Snowballing of reference lists of included articles will be used to identify additional case examples. Disagreements will be resolved through consensus, potentially a third Aboriginal team member will be included to act as the mediator and make the final decision.

4. Data extraction and synthesis

The two team members will then independently review the full text of sample literature to identify characteristics of collective capability, as conceptualised and described by the knowledge holders in the in-depth interviews, and any new characteristics that may emerge from the literature. This will include antecedents (events or phenomena prior) and consequences (what happens as a result). We will use the questions below in, Table 1 to form the coding framework for the core analysis phase, as outlined by Tofthagen and Fagerstrøm 2010, and to identify patterns in the text.³² Extracted data will include, but not limited to: definitions of collective capability; associated terms; attributes; antecedents; consequences; examples of collective capability being used; setting/context; discipline; theory used (yes/no and summary if yes); year of publication; and country. We will use QSR NVivo 12 software to store, manage, code and analyse data.³⁵ A general inductive approach for analysing qualitative data will be applied.³⁷

Table 1 Questions for the core analysis phase

Criteria	Description
Surrogate terms	Do other words say the same thing as collective capability? Do other words have something in common with collective capability?
Antecedents	Which events or phenomena have been associated with collective capability in the past?
Attributes	What are the characteristics of collective capability?
Examples	Are concrete examples of collective capability described in the data material?
Consequences	What happens after or as a result of collective capability?

5. The team members will meet to confirm the coding of text and terms that are commonly used in the literature, and the main themes and patterns that emerge during the analysis. We will use inter-rater reliability (IRR) as the method for the coding agreement process. ^{39p.385} IRR ensures trustworthiness of the interpretation and coding of the data by coders using the same coding framework. A percentage crude agreement measurement will determine the two coders reach consensus of the same result. ⁴⁰ As a general rule, consensus of approaching or exceeding 85% agreement on 95% of the codes will be applied, as consistent with other studies. ^{40,41}

6. After distillation of key collective capability attributes (including definitions of collective capability) we will develop and then test the tool (Table 2) for examples from the literature describing the characteristics of collective capability in Indigenist evaluation. This will provide examples of models for collective capability in evaluations.

Table 2 Attribute assessment for collective capability in evaluation

	Attribute 1.	Attribute 2.	Attribute 3.	Attribute 4.	Attribute 5.
Example 1.	X		Х		
Example 2.		Х			X
Example 3.	Х	Х	Х	Х	X
Example 4.		Х	Х	Х	X

7. The findings will be presented to the PAG and the Thiitu Tharrmay internal reference group at the ANU. This approach further ensures that dissemination of findings and feedback are captured from an Indigenist standpoint and in line with Indigenist approaches. Implications and further research will also be established during this step.

ETHICS AND DISSEMINATION

The protocol has been reviewed and informed by Thiitu Tharrmay. The draft protocol was presented by BM to the Thiitu Tharrmay for input, discussion and feedback, and the protocol for primary data collection has approval from the Australian Institute of Aboriginal and Torres Strait Islander Studies Human Research Ethics Committee, ethics approval no. EO239-20210114. Findings will be disseminated through a peer-reviewed journal; conference presentations; and presentations to the PAG, the Thiitu Tharrmay reference group and Aboriginal and Torres Strait Islander community partners supporting this project.

DISCUSSION AND IMPLICATIONS

To assist in improving evaluation practice in Australia, a shift in practice is required. An Indigenist collective capability approach may provide a solution. This requires including Indigenous methodologies and methods, decision making and participation as core processes and structures for evaluations in Indigenous contexts. Further, the approach should be underpinned by Indigenous worldviews and consistent with UNDRIP,⁴² and supported by Indigenous evaluation frameworks, methodological approaches and methods, that are culturally safe appropriate to the population of interest.^{11, 13}

Through an 'Indigenist collective capability' framework, we expect that the quality of evaluation will be improved, as we move to Indigenous empowerment and leadership in evaluation practices. Including Indigenous methodologies and methods, better cultural understanding of the context in which services and programs are situated and sense-making of findings of evaluations are ways to enhance the quality of evaluations.^{2, 4, 7, 8, 11} Further, there is a need to create safe space for Aboriginal and Torres Strait Islander peoples to actively participate, include an Indigenous lens, and embed such practices as standard practice in evaluation in Indigenous contexts.^{3, 7, 13, 19}

This protocol proposes a method for the development of a new model of Indigenist evaluation with the aim of improving Indigenous evaluation practice in Australia. Through the work described, we will define collective capability and establish characteristics, attributes and how collective capability is conceptualised in Indigenous evaluation practice using the concept analysis methodology. Operational definitions could be established

through the exploration of the literature and identifying exemplars or models applying collective capability. Lastly, the findings from the concept analysis will help inform the development of a collective capability framework and assessment tool for Indigenist evaluation.



Author Contributors: BM conceived the idea for the manuscript. BM conceptualised the study method and then had input from all authors. BM produced the initial draft of the manuscript. All authors were involved in drafting the manuscript. All authors approved the final version of the paper and take responsibility for its content.

Funding Statement: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing Interests: The authors declare no conflict of interest.

Patient consent: Not applicable.

Ethics approval: This study has been approved by the Australian Institute for Aboriginal and Torres Strait Islander Studies research ethics committee, EO239-20210114.

Open access: This is an open access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY 4.0) license, which permits others to distribute, remix, adapt and build upon this work, for commercial use, provided the original work is properly cited. See: http:// creativecommons. org/licenses/ by/ 4. 0/c Article author(s) (or their employer(s) unless otherwise stated in the text of the article) 2018. All rights reserved. No commercial use is permitted unless otherwise expressly granted.



REFERENCES

- 1. Fain JA. Is there a difference between evaluation and research? *The Diabetes Educator* 2005;31(2):150-52.
- Maddox R, Blais G, Mashford Pringle A, et al. Reviewing health service and program evaluations in Indigenous contexts. *American Journal of Evaluation* 2021;42(3)
- 3. Price M, McCoy B, Mafi S. Progressing the dialogue about a framework for Aboriginal evaluations: Sharing methods and key learnings. *Evaluation Journal of Australasia* 2012;12(1):32-37.
- 4. Kelaher M, Luke J, Ferdinand A, et al. An evaluation framework to improve Aboriginal and Torres Strait Islander health. Carlton: The Lowitja Institute, 2018:vi-79.
- 5. Productivity Commission. Indigenous Advancement Strategy: Issues Paper. Canberra: Commonwealth of Australia, 2019.
- 6. Lokuge K, Thurber K, Calabria B, et al. Indigenous health program evaluation design and methods in Australia: A systematic review of the evidence. *Australian and New Zealand Journal of Public Health* 2017;41(5):480-82.
- 7. Williams M. Ngaa-bi-nya Aboriginal and Torres Strait Islander program evaluation framework. *Evaluation Journal of Australasia* 2018;18(1):6-20.
- 8. Productivity Commission. Indigenous Evaluation Strategy. Canberra: Commonwealth of Australia, 2020.
- 9. Mikhailovich K, Morrison P, Arabena K. Evaluating Australian Indigenous community health promotion initiatives: A selective review. *Rural and Remote Health* 2007;7(2):746.
- 10. Finlay SM, Cargo M, Smith JA, et al. The dichotomy of commissioning Indigenous health and wellbeing program evaluations: What the funder wants vs what the community needs. *Health Promotion Journal of Australia* 2021;32(2):149-51.
- 11. Cargo M, Potaka-Osborne G, Cvitanovic L, et al. Strategies to support culturally safe health and wellbeing evaluations in Indigenous settings in Australia and New Zealand: a concept mapping study. *International Journal for Equity in Health* 2019;18(1):194.
- 12. Grey K, Yamaguchi J, Williams E, et al. The strength of Indigenous Australian evaluators and Indigenous evaluation: A snapshot of "Ways of Knowing and Doing" reflecting on the 2014 Darwin conference of the Australasian Evaluation Society. *New Directions for Evaluation* 2018;2018(159):79-95.
- 13. Katz I, Newton B, Bates S, et al. Evaluation theories and approaches, relevance for Aboriginal contexts. Sydney: Social Policy Research Center, University of New South Wales, 2016.
- 14. Rosile GA, M Boje D, Claw CM. Ensemble leadership theory: Collectivist, relational, and heterarchical roots from indigenous contexts. *Leadership* 2018;14(3):307-28.
- Walter M, Suina M. Indigenous data, Indigenous methodologies and Indigenous data sovereignty. *International Journal of Social Research Methodology* 2019;22(3):233-43.
- 16. Wehipeihana N. Increasing Cultural Competence in Support of Indigenous-Led Evaluation: A Necessary Step toward Indigenous-Led Evaluation. *Canadian Journal of Program Evaluation* 2019;34(2)
- 17. Wehipeihana N, Bailey R, Davidson EJ, et al. Evaluator competencies: The Aotearoa New Zealand experience. *Canadian Journal of Program Evaluation* 2014;28(3)
- 18. Chandna K, Vine MM, Snelling S, et al. Principles, approaches, and methods for evaluation in Indigenous contexts: a grey literature scoping review. *Canadian Journal of Program Evaluation* 2019;34(1)

- 19. Rogers A, Bower M, Malla C, et al. Developing a cultural protocol for evaluation. *Evaluation Journal of Australasia* 2017;17(2):11-19.
- 20. Smylie J, Kaplan-Myrth N, McShane K, et al. Indigenous knowledge translation: Baseline findings in a qualitative study of the pathways of health knowledge in three indigenous communities in Canada. *Health Promotion Practice* 2009;10(3):436-46.
- 21. Sen A. Human rights and capabilities. Journal of human development 2005;6(2):151-66.
- 22. Evans P. Collective capabilities, culture, and Amartya Sen's development as freedom. Studies in Comparative International Development 2002;37(2):54-60.
- 23. Miller K. Balancing individualism and collectivism in an Australian Aboriginal context. In: McIntyre-Mills J, Romm N, Corcoran-Nantes Y, eds. Balancing Individualism and Collectivism: Springer 2018:199-209.
- 24. Murphy M. Self-determination as a collective capability: The case of indigenous peoples. *Journal of Human Development and Capabilities* 2014;15(4):320-34.
- 25. Ibrahim SS. From individual to collective capabilities: The capability approach as a conceptual framework for self-help. *Journal of Human Development* 2006;7(3):397-416.
- 26. Sangha KK, Le Brocque A, Costanza R, et al. Application of capability approach to assess the role of ecosystem services in the well-being of Indigenous Australians. *Global Ecology and Conservation* 2015;4:445-58.
- 27. Squires JE, Graham ID, Hutchinson AM, et al. Understanding context in knowledge translation: A concept analysis study protocol. *Journal of Advanced Nursing* 2015;71(5):1146-55.
- 28. Ramsay S, Boddy J. Environmental social work: A concept analysis. *The British Journal of Social Work* 2017;47(1):68-86.
- 29. Hurst SK, Dotson JAW, Butterfield P, et al. Stigma resulting from head lice infestation: A concept analysis and implications for public health. *Nursing Forum* 2020;55(2):252-58.
- 30. Hughes M, Duffy C. Public involvement in health and social sciences research: A concept analysis. *Health Expectations* 2018;21(6):1183-90.
- 31. Rodgers BL. Exploring health policy as a concept. *Western Journal of Nursing Research* 1989;11(6):694-702.
- 32. Tofthagen R, Fagerstrøm LM. Rodgers' evolutionary concept analysis—a valid method for developing knowledge in nursing science. *Scandinavian Journal of Caring Sciences* 2010;24:21-31.
- 33. Morse JM, Hupcey JE, Mitcham C, et al. Concept analysis in nursing research: a critical appraisal. *Scholarly Inquiry for Nursing Practice* 1996;10(3):253-77.
- 34. The University of Melbourne. Charter for research with Indigenous knowledge holders. 2017 [Available from: https://indigenousknowledge.unimelb.edu.au/support/charter-for-research-with-indigenous-knowledge-holders] accessed 7 June 2021.
- 35. Sherriff N, Hall V, Panton C. Engaging and supporting fathers to promote breast feeding: A concept analysis. *Midwifery* 2014;30(6):667-77.
- 36. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qualitative Health Research* 2005;15(9):1277-88.
- 37. Thomas DR. A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation* 2006;27(2):237-46.
- 38. Mengesha MM, Ajema D, Teshome A, et al. The association between diagnosis disclosure and adherence to antiretroviral therapy among adolescents living with HIV in sub-Saharan Africa: a protocol for systematic review and meta-analysis.

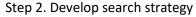
 Systematic reviews 2020;9(1):1-5.

- 39. Haslam SA, McGarty C. Research methods and statistics in psychology. London: Sage Publications 2014:xi-520.
- 40. McAlister A, Lee D, Ehlert K, et al. Qualitative coding: An approach to assess inter-rater reliability. 2017 American Society for Engineering Education Annual Conference and Exposition. Columbus, Ohio, 2017:5-9.
- 41. Singleton KJ, Neuber KS. Examining how students with visual impairments navigate accessible documents. *Journal of Visual Impairment & Blindness* 2020;114(5):393-405.
- 42. United Nations General Assembly. United Nations Declaration on the Rights of Indigenous Peoples, 2008.



Step 1. Qualitative interviews *

In-depth interviews with knowledge holders will occur in the first instance. A general inductive approach will be applied to analyse the data. The findings will inform the search strategy (Step 3) and inclusion criteria of the concept analysis of the literature.



Compile the associated terms, as identified by the knowledge holders (Step 1) to develop a search strategy. This includes terms that share similar expressions and synergies with collective capability. New terms may be identified; as new associated terms may be revealed during the literature search. The context in which collective capability is used will also be identified.

Step 3. The search

Search the literature using the search strategy, and the inclusion and exclusion criteria. All databases to be accessed will be included, and disciplines chosen for the inclusion of the study. MeSH terms and subject headings will be used in each database. An extensive spectrum of databases and sources will be included.

Step 4. Data extraction and synthesis

Analyse and synthesise the data from the literature to identify characteristics of collective capability, as conceptualised and described by the knowledge holders in the in-depth interviews, and any new characteristics that may emerge from the literature.

Step 5. Consensus *

Two team members will meet to discuss the review and assessment of the literature.

Step 6. Examples

If appropriate, a model case or exemplar of collective capability in an Indigenous evaluation context from the literature will be identified.

Step 7. Implications

Findings will be shared with the PAG and Thiitu Tharrmay governance groups, and other stakeholders. Implications and further research will be established.

^{*}Adapted components of Rodgers' evolutionary method

BMJ Open

Defining collective capability in Australian evaluations that are conducted by, for and with Indigenous peoples for health programs, policies and services: a concept analysis protocol

Journal:	BMJ Open
Manuscript ID	bmjopen-2021-055304.R1
Article Type:	Protocol
Date Submitted by the Author:	02-Oct-2021
Complete List of Authors:	Maher, Bobby; Australian National University College of Health and Medicine, Research School of Population Health Guthrie, Jillian; Australian National University, Research School of Population Health Sturgiss, Elizabeth; Monash University, School of Primary and Allied Health Care; The Australian National University, National Centre for Epidemiology and Population Health CARGO, Margaret; University of Canberra, Lovett, Raymond; Australian National University, National Centre for Epidemiology and Population Health, Research School of Population Health
Primary Subject Heading :	Public health
Secondary Subject Heading:	Qualitative research, Health policy, Research methods, Health services research
Keywords:	PUBLIC HEALTH, QUALITATIVE RESEARCH, Health policy < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, Organisational development < HEALTH SERVICES ADMINISTRATION & MANAGEMENT

SCHOLARONE™ Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our licence.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which Creative Commons licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

- 1 Defining collective capability in Australian evaluations that are
- 2 conducted by, for and with Indigenous peoples for health
- 3 programs, policies and services: a concept analysis protocol
- 4 Authors: Bobby Maher (Yamatji)¹, Jill Guthrie (Wiradjuri)¹, Elizabeth Sturgiss^{2,1}, Margaret
- 5 Cargo³, Raymond Lovett (Wongaibon, Ngiyampaa)¹
- 6 Corresponding author: Ms Bobby Maher
- 7 Address: 54 Mills Road, National Centre for Epidemiology and Population Health, Research
- 8 School of Population Health, The Australian National University, Acton ACT 2601
- **Email:** bobby.maher@anu.edu.au
- **Phone:** +61 2 6125 0621

- Full name, department, institution, city and country of all co-authors.
- National Centre for Epidemiology and Population Health, Research School of
 Population Health, The Australian National University, Acton, ACT, Australia
- ² School of Primary and Allied Health Care, Monash University, Frankston, VIC, Australia
- ³ Health Research Institute, Faculty of Health, University of Canberra, Bruce, ACT,
- 17 Australia

- ORCID
- 21 1. Bobby Maher: 0000-0002-7079
- 22 2. Jill Guthrie: 0000-0001-5031-0910
- 3. Elizabeth Sturgiss: 0000-0003-4428-4060
- 4. Margaret Cargo: 0000-0002-6466-7627
- 25 5. Raymond Lovett: 0000-0002-8905-2135

- Word count (excluding title page, abstract, references, figures and tables): 4,072
- **Tables:** 2
- **Figures:** 1
- 31 Supplementary File: 1
- 32 References: 55

ABSTRACT

Introduction: Indigenist evaluation is emergent in Australia; the premise of which is that evaluations are undertaken for Indigenous, by Indigenous and with Indigenous people. This provides opportunities to develop new models and approaches. Exploring a collective capability approach could be one way to inform an Indigenist evaluation methodology. Collective capability suggests that a base of skills and knowledges exist, and when these assets come together, empowerment and agency emerge. However, collective capability requires defining as it is not common terminology in population health or evaluation. Our aim is to define the concept of collective capability in Indigenist evaluation in Australia from an Australian Indigenous standpoint.

Methods and analysis: A modified Rodgers' evolutionary concept analysis will be used to define collective capability in an Australian Indigenous evaluation context, and to systematically review and synthesise the literature. Approximately 20 qualitative interviews with Aboriginal and Torres Strait Islander knowledge holders will clarify the meaning of collective capability and inform appropriate search strategy terms with a consensus process then used to code of the literature. We will then systematically collate, synthesise and analyse the literature to identify exemplars or models of collective capability from the literature.

Ethics and dissemination: The protocol has approval from the AIATSIS Ethics Committee, approval no. EO239-20210114. All knowledge holders will provide written consent to participate in the research. This protocol provides a process to developing a concept, and will form the basis of a new framework and assessment tool for Indigenist evaluation practice. The concept analysis will establish definitions, characteristics and attributes of collective capability. Findings will be disseminated through a peer-reviewed journal, conference presentations, the project advisory group, the Thiitu Tharrmay reference group and Aboriginal and Torres Strait Islander community partners supporting the project.

KEYWORDS: Program Evaluation; Aboriginal and Torres Strait Islander; Collective Capability; Indigenous-led; Concept Analysis; Indigenist Evaluation

STRENGTHS AND LIMITATIONS OF THIS STUDY:

- This paper describes a protocol for defining collective capability within an Indigenist methodological context, and includes the investigator team being driven by Aboriginal researchers.
- In-depth interviews with Indigenous knowledge holders will occur in the first instance to inform the search terms and define collective capability from an Indigenous standpoint.
- The concept may be completely new and not fully established in the literature relating to the Australian evaluation context.
- The concept may not be internationally relevant.



INTRODUCTION

Reform in Indigenous evaluation practice is occurring in Australia; there is a call to action to better understand where progress is being made in Aboriginal and Torres Strait Islander health and social outcomes, and the effectiveness of programs, policies and services in supporting this progress. Evaluation practice is an important vehicle to make judgements on whether programs, policies or services are working or not working within a particular context.¹⁻³ Evaluations of programs, policies and services relevant to Indigenous people and communities are essential to establish an evidence base and an understanding of progress in health and social outcomes.^{2, 4, 5-7} There is however, little evidence through quality program evaluations to show what is working and what is not working, and how Aboriginal and Torres Strait Islander peoples benefit, implying that policies and programs are not working as well.^{4, 7-10} With limited and poor quality published evaluation evidence, there is a gap in knowledge and lessons learned.

The current Indigenous evaluation landscape in Australia has tended to be positioned in settler-colonialism and may be responsible for the current poor state of Indigenous evaluations in Australia.^{7, 8, 11} Dominant settler-colonial approaches and perspectives applied to evaluation methodologies, engagement, design and methods becomes problematic for evaluations of Indigenous programs, policies and services within community settings as it often excludes local context, perspectives, experiences and knowledges.^{2, 12, 13} Additionally, current practice commonly fails to address underlying power imbalances due to external evaluation teams who are often outsiders to communities.^{2, 7} Indigenous cultures are highly contextual; context matters.¹⁴ For Aboriginal and Torres Strait Islander people, this considers the diversity in culture, place, knowledge systems, experiences and lifeworlds.¹⁵

As has been shown elsewhere in the world, Indigenist approaches applied to evaluation translates to evaluation that benefits Indigenous people; includes Indigenous people; and is guided by principles, practice and knowledges that are Indigenous. ¹⁶⁻¹⁸ Internationally, Indigenous evaluation has been defined and operationalised to be 'by Indigenous, for Indigenous, with Indigenous and as Indigenous'. ^{2, 16p.370, 17, 18} In Australia, we see some elements of Indigenist approaches integrated into evaluation practice and often manifest as Indigenous governance, ^{7, 11} cultural protocols that inform ethical and respectful relationships with communities, ^{7, 12, 19} and processes and strategies for meaningful knowledge translation with communities. ^{3, 4, 7, 20} However, these are not features of standard evaluation practice.

Indigenist research and evaluation methodologies are evolving in Australia. ^{7 21-24} Indigenist approaches acknowledge Aboriginal and Torres Strait Islander capabilities in research processes and structures such as participatory research methods; governance; community engagement and cultural protocols, to inform strengths-oriented evaluation application and ensure cultural safety of evaluation practice. ^{11 19 24} Creating platforms to support Aboriginal and Torres Strait Islander people to be in the driver's seat of decision making processes, and valuing their knowledge and community expertise allows for an assets-based practice in Indigenist evaluation. This promotes evaluation as inclusive, safe, respectful and ethically aligned with Aboriginal and Torres Strait Islander ways of knowing, being and doing. Further, Indigenist approaches support leadership capability of Aboriginal and Torres Strait Islander people and communities in evaluation. ^{7 12}

Existing frameworks and cultural protocols guiding evaluations of Aboriginal and Torres

47 Strait Islander programs and policies capture some elements of Indigenist approaches, and

7

- 1 are intended to inform cross-cultural practices and commissioning processes. The work of
- Williams (2018), Wright et al. (2021)²⁵ and Rogers et al. (2018)¹⁹ draw on co-design
- 3 processes in evaluations that centres Aboriginal and Torres Strait Islander perspectives,
- 4 experiences and leadership. These frameworks provide clear guidance of processes to
- 5 ensure local knowledge and cultural protocols are embedded in the design and processes of
- 6 evaluations. Further, they ensure that governance through elders and knowledge holders
 - are an essential component of evaluation practice at the community level. Additionally, the
- 8 Lowitja Institute's evaluation framework to improve Indigenous health supports evaluations
- 9 to benefit Aboriginal and Torres Strait Islander people. ⁴ The principles-based framework
- supports cross-cultural process for evaluators and commissioners of evaluations to ensure
- 11 strength-based approaches, partnerships, capacity building, cultural competence and
- 12 Aboriginal and Torres Strait leadership are embedded into all stages of evaluations as co-
- 13 design processes.
- 14 These frameworks focus towards non-Indigenous evaluators, researchers, organisations and
- 15 commissioners of evaluations to being culturally competent and safe. The concept of
- 16 collective capability aims to (re)center Indigenous epistemology and to ensure culturally
- 17 robust evaluation practice through joining together concepts of collectivist and capability
- that are novel in evaluation.^{26, 27}
- 19 Indigenous societies are often described as 'collective' or 'collectivist', because the
- 20 emphasis is on the group above individuals. The role of collectivism is a shared and
- 21 relational intent; to determine the solutions of the issues that Indigenous peoples
- 22 collectively define and identify.²⁸ In part, collectivism is strongly aligned with self-
- 23 determination for Indigenous peoples.²⁹ Capability relates to the tools, skills and resources
- 24 that enhance the wellbeing of a person to live and lead a life that they value; thus gaining
- 25 the freedom to do the things that align with these values. 26, 27, 30, 31 Values are context
- specific, relating to knowing, 'doing and being' that are intricately linked to Indigenous
- 27 'lifeworlds', and integrates knowledge, kinship structures and realities. 15 Therefore, when
- collective and capability come together, it implies that the collective action of individuals
- and their capabilities results in decision making and participation processes and structures
- that benefit the 'collective'. Our sense is that collective capability suggests that a base of
- 31 skills and knowledge exist within Aboriginal and Torres Strait Islander people and
- communities, and when these assets come together, empowerment and agency emerge.
- 33 Applying Indigenist approaches to evaluation dismantles the deficit framing of evidence by
- 34 placing a lifeworld and solutions-based perspective to better reflect Aboriginal and Torres
- 35 Strait Islander realities, thus improving the quality and usefulness of the evidence base.
- 36 Further, to enhance Indigenous evaluation practice in Australia and move to Indigenist
- 37 evaluation, new frameworks and models are required; that support governance, leadership
- 38 and centre Indigenous knowledge and perspectives.
- 39 We aim to establish a collective capability definition and extract operational elements of
- 40 collective capability within evaluation practice in Australia, and of potential relevance
- 41 internationally, to inform Indigenist evaluation.

METHODS AND ANALYSIS

43 Methodology

- 44 Concept analysis has been used in nursing science to develop theory and models to inform
- 45 clinical practice.³² It has since been applied to a number of fields and disciplines including

public health, social work and health policy.³³⁻³⁶ The methodology is a systematic approach drawing from a combination of primary research literature and grey literature, and an analysis of these literatures to determine the characteristics and attributes of a concept that appears vague and ambiguous. A concept analysis can be used to establish meaning and clarity of the concept and has been described as 'the systematic examination of the attributes or characteristics of a given concept for the purpose of clarifying the meaning of that concept'.^{35p.1184}

Methods

A modified Rodgers' evolutionary method

- Rodgers' evolutionary concept analysis is a systematic and inductive method of analysis to clarify concepts that may be ambiguous and vague to inform knowledge that has mostly been applied in nursing.^{37, 38} A five step process is used to define, describe and explain a concept within the context in which it used. The steps include: (1) Identification of the concept, including the definition, associated terms, and relevant use; (2) Selection of the sample and setting of data collection; (3) Collection and analysis of data that identify the attributes, antecedents and consequences of the concept; (4) Exemplars of the concept (if
- appropriate); and (5) Identify implications for nursing and further research and
- development.³⁴ Rodgers' evolutionary method is cyclical in nature and acknowledges that
- 20 concepts are continually evolving and changing. Therefore, the analysis will not necessarily
- 21 determine an endpoint for a concept and may require further research to redefine the
- concept as it develops over time.³⁷
- 23 We will be modifying Rodgers' evolutionary method to include a fieldwork component with
- 24 knowledge holders to develop the concept from an Indigenous standpoint. Further, the
- 25 inclusion of inquiry with Indigenous knowledge holders aligns with Indigenist research
- approaches; to privilege Indigenous voices, experiences and knowledge. Indigenist
- approaches acknowledge western research knowledge and methods, however, they choose
- 28 to center knowledge systems that reflect Indigenous lifeworlds. Knowledge holders refers to
- 29 Aboriginal and Torres Strait Islander peoples who have expertise in evaluation, Indigenous
- research methods and community-based research.³⁹ We will start with in-depth qualitative
- 31 interviews (Step 1, see figure 1) with knowledge holders to draw out how collective
- capability is described; establish a definition; and explain how it is operationalised in
- 33 Indigenist evaluation practice in Australia. 40 Yarning as a conversational method will be
- 34 applied to the interviews to enable a two-way exchange between the interviewer and the
- 35 knowledge holder. Yarning aligns with Indigenous lifeworlds and the relational nature of
- 36 Indigenist approaches. 41 42 Associated terms, characteristics and attributes will also be
- identified in the interviews; these will then be used to inform the literature search strategy.

Aboriginal and Torres Strait Islander governance

- 39 Inline within Indigenist approaches, this development is led and managed by Aboriginal
- 40 researchers. Two governance structures will provide guidance and advice to the project. We
- 41 will establish a Project Advisory Group (advisory group) to inform and provide advice on the
- 42 project approaches. Members will have expertise in Indigenous evaluation, community-
- 43 based research methods and policy making. Additionally, Thiitu Tharrmay is an Aboriginal
- 44 and Torres Strait Islander reference group that provides advice to parts of the research
- 45 program at the Australian National University. In the Ngiyampaa language, 'thiitu tharrmay'

- means 'to share knowledge'. Thiitu Tharrmay membership includes experts in Indigenous
- health and community-based research, research methods and policy.
- Recruitment

- A purposive sampling strategy of professional networks from the team and advisory group
- will inform the recruitment of Indigenous knowledge holders. The knowledge holders are
 - relational to the Aboriginal team members and advisory group; we have existing
- relationships informed by our Indigeneity and work. The criteria for recruitment aligns with
- our research objective and includes knowledge holders who have contributed to Indigenous
- evaluation practice; either as evaluators, experts on evaluation panels; commissioning
- agencies of evaluation; or are an Aboriginal community or community organisation
- recognised for participation in evaluation. We aim to undertake approximately 20
- interviews, or until we start to see thematic and theoretical exhaustion in the interviews.⁴³
- start analysis to c ⁴⁴ The interviews and analysis to define the concept of collective capability will be complete
- by February 2022.



Figure 1. Process of modified Rodgers' evolutionary concept analysis

Implementing the seven steps of the concept analysis of the literature

- 1. Undertake qualitative interviews using a conversation method known as yarning,^{41 42} and includes:
 - a. Can I ask you why you said yes to this interview?
 - b. What words come to mind when you hear the word evaluation?
 - i. What do you think Indigenous evaluation is?
 - ii. Probing questions: Can you tell me a bit more about your experience (term, or the words the participant has mentioned)
 - c. What is important in Indigenous evaluation?
 - d. What does the word collective mean to you?
 - i. Probing question: What other words represent collective?
 - ii. Probing question: How would you explain collective to other people?
 - e. What words come to mind when you hear the word capability?
 - i. Probing question: What other words represent capability?
 - ii. Probing question: How would you explain capability to other people?
 - f. If we brought the words collective and capability together, how would you explain collective capability to other people?
 - i. Probing question: What other words would you use to explain collective capability?
 - ii. Probing question: I've bought along these images along today, do any of these resonate collective capability, and can you tell me why? (there will be approximately six abstract images. No identifying of people or places)
 - g. How would you explain collective capability in Indigenous evaluation?
 - i. Probing question: Do you think it happens now in Indigenous evaluation?
 - ii. Probing question: What would you see if collective capability was applied to Indigenous evaluation?
 - iii. Probing question: How would things be different if collective capability was happening now, like you described?

An interview guide providing further detail of the yarning process and how they may unfold has been developed as an additional document (Supplementary file 1).

Analysis of interview data will be conducted using conventional content analysis drawing on the knowledge holders lived experience and knowledge of the concept collective capability. ⁴⁵ An inductive approach will also be applied to analyse the data to find meaning from the content of text through consolidating and organising the text, and to identify associated terms, characteristics (including the antecedents and consequences of the characteristics) and attributes to describe collective capability. ⁴⁶

- 2. The content analysis results will be used as the search terms to inform the search strategy. The search strategy will involve an iterative process drawing on the associated terms identified in the qualitative interviews with knowledge holders. We will use the associated terms to inform the search terms. This may include or extend the search terms listed in Box 1 which were identified by the research team.
- Box 1. Example search terms

Indigenous OR "First Nation" OR "First People" OR Aboriginal OR
"Torres Strait" OR Maori OR "Native American" OR "American
Indian" OR "Native Hawaiian" OR, "Alaska Native" OR metis OR
inuit OR sami
Capability, capacity, self-determination, sovereignty, control, ownership, decision-making, Indigenous-led (this may be covered
by the other terms)

Community, community-based, co-design

Evaluation, program monitoring, accountability

Boolean terms: Collective AND Capability building

Terms identified from Step 1 content analysis

Additionally, we will

draw on the discussions of how collective capability has been described in the interview data to establish the characteristics and attributes of collective capability in Indigenist evaluation. This may include patterns or themes from the analysis of the data and will inform the inclusion/exclusion criteria of the search strategy.

17 Inclusion

- Literature that describes collective capability as per findings from the qualitative interviews and/or describes its characteristics will be considered for inclusion. Particular focus will be on Indigenous evaluation practices and how the concept is applied to evaluation design, methodology and methods. We will include Indigenous specific and universal programs that target Indigenous populations.
- We are interested in evaluation design, methodology and methods that include
 participatory approaches. We will also include study designs that include experimental or
- 25 clinical trials.
- 26 There may be different theories that define the concept of collective capability within other
- 27 contexts/disciplines, it will be important to include the theoretical context that applies to
- 28 Indigenous self-determination, agency and participation. Therefore, theoretical materials
- 29 (commentaries, conceptual writing, think pieces) will be included as well as empirical
- 30 literature (research studies and review articles). Theoretical material from community
- 31 development and health promotion that describes theories, frameworks and/or models
- where the concept is a component will be considered.
- 33 Exclusion
- 34 Articles in languages other than English will not be included. We will exclude program
- 35 evaluations of universal programs where the focus is not on Indigenous peoples or
- 36 communities.
- 37 The following electronic databases will be searched for relevant literatures: Applied Social
- 38 Sciences Index and Abstracts; Scopus; Google Scholar; Google; Informit Indigenous
- 39 collection; ProQuest Dissertations; and PubMed. We will also include grey literature, in

particular government evaluation reports, commissioned evaluation reports, dissertations
 and evaluation workshops and conference material.

3. The search

Two Aboriginal team members will independently assess titles and abstracts of relevant articles and literature, and remove any duplicates. Searching and screening will occur concurrently, and we will use the COVIDENCE software for title/abstract screening, full-text screening, quality assessment, and data extraction.⁴⁷ Results from the search strategy will be screened and search terms reviewed based on citations selected for inclusion. A second search will occur with revised terms and repeat the screening. Snowballing of reference lists of included articles will be used to identify additional case examples. Disagreements will be resolved through consensus, potentially a third Aboriginal team member will be included to act as the mediator and make the final decision.

4. Data extraction and synthesis

The two team members will then independently review the full text of sample literature to identify characteristics of collective capability, as conceptualised and described by the knowledge holders in the in-depth interviews, and any new characteristics that may emerge from the literature. This will include antecedents (events or phenomena prior) and consequences (what happens as a result). We will use the questions below in, Table 1 to form the coding framework for the core analysis phase, as outlined by Tofthagen and Fagerstrøm 2010, and to identify patterns in the text. Textracted data will include, but not limited to: definitions of collective capability; associated terms; attributes; antecedents; consequences; examples of collective capability being used; setting/context; discipline; theory used (yes/no and summary if yes); year of publication; and country. We will use QSR NVivo 12 software to store, manage, code and analyse data. A general inductive approach for analysing qualitative data will be applied.

Table 1 Questions for the core analysis phase

Criteria	Description		
Surrogate terms	Do other words say the same thing as collective capability?		
	Do other words have something in common with collective capability?		
Antecedents	Which events or phenomena have been associated with		
	collective capability in the past?		
Attributes	What are the characteristics of collective capability?		
Examples	Are concrete examples of collective capability described in the		
	data material?		
Consequences	What happens after or as a result of collective capability?		

 5. The team members will meet to confirm the coding of text and terms that are commonly used in the literature, and the main themes and patterns that emerge during the analysis. We will use inter-rater reliability (IRR) as the method for the coding agreement process. ABP. BRR ensures trustworthiness of the interpretation and coding of the data by coders using the same coding framework. A percentage crude agreement measurement will determine the two coders reach consensus of the same result. AB as a general rule, consensus of approaching or exceeding 85% agreement on 95% of the codes will be applied, as consistent with other studies.

6. After distillation of key collective capability attributes (including definitions of collective capability) we will develop and then test the tool (Table 2) for examples from the literature describing the characteristics of collective capability in Indigenist evaluation. This will provide examples of models for collective capability in evaluations.

Table 2 Attribute assessment for collective capability in evaluation

	Attribute 1.	Attribute 2.	Attribute 3.	Attribute 4.	Attribute 5.
Example 1.	Х		Х		
Example 2.		Х			X
Example 3.	Х	Х	Х	Х	X
Example 4.		Х	Х	Х	X

7. The findings will be presented to the advisory group and the Thiitu Tharrmay internal reference group at the ANU. This approach further ensures that dissemination of findings and feedback are captured from an Indigenist standpoint and in line with Indigenist approaches. Implications and further research will also be established during this step.

PATIENT AND PUBLIC INVOLVEMENT

Experiences of evaluations for Indigenous populations in Australia have informed the development of the research question. The research question, project design, recruitment strategy and results are informed by Indigenous Australians and their expertise.

ETHICS AND DISSEMINATION

The protocol has been reviewed and informed by Thiitu Tharrmay. The draft protocol was presented by BM to the Thiitu Tharrmay for input, discussion and feedback, and the protocol for primary data collection has approval from the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) Human Research Ethics Committee, ethics approval no. EO239-20210114.

Knowledge holders will be provided with a participant information sheet outlining that information from the interviews will be used to develop a definition for collective capability and inform how collective capability might look in Indigenous evaluation. Knowledge holders will be informed that their participation in the interview is voluntary and that they may withdraw at any time prior to publication of data, including withdrawal of consent for use of any interview data you have provided. If knowledge holders withdraw from the research, data will be securely destroyed. Knowledge holders will remain anonyms and will be provided with the transcript of their interview to review. Any information that they do not want to be included in the analysis can be removed at this stage. The data text from the interviews will be de-identified prior to analysis. Knowledge holders will provide written consent to participate in the interviews.

We will share the preliminary results with the advisory group for input and sense making of the results and the outcomes. These processes ensure a face validity process is embedded into the methodological approach, aligning with Indigenist approaches. Findings will be disseminated through a peer-reviewed journal; conference presentations; and presentations to the advisory group, the Thiitu Tharrmay reference group and Aboriginal and Torres Strait Islander community partners supporting this project. All knowledge

- 1 holders will be asked if they wish to be invited to forums where the presentation of findings
- 2 will occur, and for access to publication links related to the research to be provided to them.
- 3 In accordance with the Intellectual Property Rights and Moral Rights under the AIATSIS
- 4 Studies Guidelines for Ethical Research in Australian Indigenous Studies, and the Aboriginal
- 5 and Torres Strait Islander Data Sovereignty Principles©, participants have ownership over
- 6 their data. Team members of the project act as data custodians ensuring data security, data
- 7 integrity, and the ethical sharing of data. A data management plan was developed and
- 8 approved by the AIATSIS Human Research Ethics Committee, ensuring that data collection,
- 9 management, storage and ownership processes aligned with the rights of Aboriginal and
- 10 Torres Strait Islander people to access and control their data.

DISCUSSION

- 12 To assist in improving evaluation practice in Australia, a shift in practice is required. An
- 13 Indigenist collective capability approach may provide a solution. This first requires defining
- the term and its constituent elements, in context. This requires Indigenous peoples to lead
- all elements of developing methodologies and methods, decision making and participation
- as core processes and structures for evaluations in Indigenous contexts.
- We are utilising an existing non-Indigenous framework (Rogers) for this concept analysis
- because we were unable to identify a suitable Indigenous framework. To overcome any
- shortcomings of Rogers' framework we have modified it to include Indigenous knowledge
- 20 holders to define collective capability and inform search terms for the review of the
- 21 literature. This approach to modifying existing frameworks and methods has been used
- 22 internationally ⁵¹ ⁵² and domestically ⁵³ to ensure Indigenist elements are incorporated.
- 23 Further, these modification approaches can then be underpinned by Indigenous worldviews
- 24 and consistent with UNDRIP, 54 creating culturally safe and appropriate processes and
- 25 structures for the population of interest.^{11, 13}
- 26 This concept analysis centers Aboriginal and Torres Strait Islander knowledge, experience
- 27 and expertise to ensure a strengths-oriented methodology that is Indigenous-led, and aligns
- 28 with the AIATSIS principles: Indigenous self-determination; Indigenous leadership; Impact
- and value; and Sustainability and Accountability.⁵⁵ The weaving of Indigenist approaches
- with a modified Rodgers' evolutionary method supports a strengths-oriented approach to
- developing the concept 'collective capability'. Additionally, engaging with Aboriginal and
- 32 Torres Strait Islander knowledge holders allows the theoretical development of collective
- 33 capability from an Indigenous standpoint.
- 34 From an 'Indigenist collective capability' framework, we expect that the quality of
- evaluation will be improved, as we move to Indigenous empowerment and leadership in
- 36 evaluation practices. Including Indigenous methodologies and methods, better cultural
- 37 understanding of the context in which services and programs are situated and sense-making
- of findings of evaluations are ways to enhance the quality of evaluations.^{2, 4, 7, 8, 11} Further,
- 39 there is a need to create safe spaces for Aboriginal and Torres Strait Islander peoples to
- 40 actively participate, include an Indigenous lens, and embed such practices as standard
- 41 practice in evaluation in Indigenous contexts.^{3, 7, 13, 19}
- 42 It is possible that knowledge holders in the study may not recognise 'collective capability' as
- being aligned with Indigenous evaluation practice. Collective capability may also be
- completely new and not present in the literature relating to Indigenous evaluation in

- 1 Australia and across the world. Although unlikely, the concept may be too abstract to be
- 2 understood or operationalised. Should the concept not be recognised as 'collective
- 3 capability', other descriptive terms from the interviews and the review of the literature will
- 4 inform an alternative term.
- 5 As systematic shifts are occurring across evaluation practice, Indigenist evaluation practice
- 6 could become standard practice for evaluations of Indigenous programs, policies and
- 7 services that are intended to benefit the Aboriginal and Torres Strait Islander population.
- 8 However, adoption of new theoretical and methodological frameworks can take time and
- 9 can also be competing with current western approaches that are already embedded in
- evaluation practice. ²⁴ There is a need to improve the quality and usefulness of program
- evaluations to strengthen the evidence base, with a focus on centering Indigenous
- 12 perspectives, knowledge and priorities in evaluation practice.8
- 13 This protocol proposes a method for the development of a new model of Indigenist
- evaluation with the aim of improving Indigenous evaluation practice in Australia. Through
- the work described, we will define collective capability and establish characteristics,
- attributes and how collective capability is conceptualised in Indigenous evaluation practice

- using the concept analysis methodology. Operational definitions could be established
- through the exploration of the literature and identifying exemplars or models applying
- collective capability. Lastly, the findings from the concept analysis will help inform the
- 20 development of a collective capability framework and assessment tool for Indigenist
- 21 evaluation.

Author Contributors: BM conceived the idea for the manuscript. BM conceptualised the study methodology and input was provided from JG, LS, MC and RL. BM produced the initial draft of the manuscript. BM, JG, LS, MC and RL were involved in drafting the manuscript. BM, JG, LS, MC and RL contributed to developing the study design, provided feedback and reviewed drafts of the manuscript, and approved the final version.

Acknowledgements: Aboriginal and Torres Strait Islander members of the project advisory group for their collective contribution of knowledge and expertise into the protocol

9 development.

10 Funding Statement: This research received no specific grant from any funding agency in the

public, commercial or not-for-profit sectors.

- 12 Competing Interests: The authors declare no conflict of interest.
- 13 Patient consent: Not applicable.
- 14 Ethics approval: This study has been approved by the Australian Institute for Aboriginal and
- Torres Strait Islander Studies research ethics committee, EO239-20210114.
- 16 Open access: This is an open access article distributed in accordance with the terms of the
- 17 Creative Commons Attribution (CC BY 4.0) license, which permits others to distribute, remix,
- adapt and build upon this work, for commercial use, provided the original work is properly
- cited. See: http:// creativecommons. org/licenses/ by/ 4. 0/c Article author(s) (or their
- 20 employer(s) unless otherwise stated in the text of the article) 2018. All rights reserved. No

21 commercial use is permitted unless otherwise expressly granted.

REFERENCES

- I1. Fain JA. Is there a difference between evaluation and research? *The Diabetes Educator* 2005;31(2):150-52.
 - Maddox R, G. Blais, A. Mashford Pringle, et al. Health service and program evaluation in Indigenous contexts: A systematic review. *American Journal of Evaluation*
 - 3. Price M, McCoy B, Mafi S. Progressing the dialogue about a framework for Aboriginal evaluations: Sharing methods and key learnings. *Evaluation Journal of Australasia* 2012;12(1):32-37.
- 4. Kelaher M, Luke J, Ferdinand A, et al. An evaluation framework to improve Aboriginal and Torres Strait Islander health. Report Carlton: The Lowitja Institute, 2018.
- 5. Productivity Commission. Indigenous Advancement Strategy: Issues Paper. Canberra: Commonwealth of Australia, 2019.
 - 6. Lokuge K, Thurber K, Calabria B, et al. Indigenous health program evaluation design and methods in Australia: A systematic review of the evidence. *Australian and New Zealand Journal of Public Health* 2017;41(5):480-82.
 - 7. Williams M. Ngaa-bi-nya Aboriginal and Torres Strait Islander program evaluation framework. *Evaluation Journal of Australasia* 2018;18(1):6-20.
- 8. Productivity Commission. Indigenous Evaluation Strategy Canberra: Commonwealth of Australia, 2020.
- 9. Mikhailovich K, Morrison P, Arabena K. Evaluating Australian Indigenous community health promotion initiatives: A selective review. *Rural and Remote Health* 2007;7(2):746.
- 10. Finlay SM, Cargo M, Smith JA, et al. The dichotomy of commissioning Indigenous health and wellbeing program evaluations: What the funder wants vs what the community needs. *Health Promotion Journal of Australia* 2021;32(2):149-51.
- 11. Cargo M, Potaka-Osborne G, Cvitanovic L, et al. Strategies to support culturally safe health and wellbeing evaluations in Indigenous settings in Australia and New Zealand: A concept mapping study. *International Journal for Equity in Health* 2019;18(1):194.
- 12. Grey K, Yamaguchi J, Williams E, et al. The strength of Indigenous Australian evaluators and Indigenous evaluation: A snapshot of "Ways of Knowing and Doing" reflecting on the 2014 Darwin conference of the Australasian Evaluation Society. *New Directions for Evaluation* 2018;2018(159):79-95.
- 13. Katz I, Newton B, Bates S, et al. Evaluation theories and approaches, relevance for Aboriginal contexts. . Sydney: Social Policy Research Center, University of New South Wales, 2016.
- 14. Rosile GA, M Boje D, Claw CM. Ensemble leadership theory: Collectivist, relational, and heterarchical roots from Indigenous contexts. *Leadership* 2018;14(3):307-28.
- 15. Walter M, Suina M. Indigenous data, Indigenous methodologies and Indigenous data sovereignty. *International Journal of Social Research Methodology* 2019;22(3):233-43. doi: 10.1080/13645579.2018.1531228
- 16. Wehipeihana N. Increasing Cultural Competence in Support of Indigenous-Led Evaluation: A Necessary Step toward Indigenous-Led Evaluation. *Canadian Journal of Program Evaluation* 2019;34(2)
- 17. Wehipeihana N, Bailey R, Davidson EJ, et al. Evaluator competencies: The Aotearoa New Zealand experience. *Canadian Journal of Program Evaluation* 2014;28(3)
- 18. Chandna K, Vine MM, Snelling S, et al. Principles, approaches, and methods for evaluation in Indigenous contexts: A grey literature scoping review. *Canadian Journal of Program Evaluation* 2019;34(1)

- 19. Rogers A, Bower M, Malla C, et al. Developing a cultural protocol for evaluation.
 Evaluation Journal of Australasia 2017;17(2):11-19.
 - 20. Smylie J, Kaplan-Myrth N, McShane K, et al. Indigenous knowledge translation: Baseline findings in a qualitative study of the pathways of health knowledge in three indigenous communities in Canada. *Health Promotion Practice* 2009;10(3):436-46.
 - 21. Saunders V, West R, Usher K. Applying Indigenist research methodologies in health research: Experiences in the borderlands. *The Australian Journal of Indigenous Education* 2010;39(S1):1-7.
 - 22. Rigney L-I. Internationalization of an Indigenous anticolonial cultural critique of research methodologies: A guide to Indigenist research methodology and its principles. *Wicazo sa review* 1999;14(2):109-21.
 - 23. Whop LJ, Butler TL, Brotherton JM, et al. Study protocol: Yarning about HPV Vaccination: a qualitative study of factors influencing HPV vaccination among Aboriginal and Torres Strait Islander adolescents in Australia. *BMJ open* 2021;11(8):e047890.
 - 24. Kendall E, Sunderland N, Barnett L, et al. Beyond the rhetoric of participatory research in indigenous communities: Advances in Australia over the last decade. *Qualitative Health Research* 2011;21(12):1719-28.
 - 25. Wright M, Getta AD, Green AO, et al. Co-designing health service evaluation tools that foreground first nation worldviews for better mental health and wellbeing outcomes. *International Journal of Environmental Research and Public Health* 2021;18(16):8555.
- 22 26. Sen A. Human rights and capabilities. *Journal of human development* 2005;6(2):151-66.
 - 27. Evans P. Collective capabilities, culture, and Amartya Sen's development as freedom. Studies in Comparative International Development 2002;37(2):54-60.
 - 28. Miller K. Balancing individualism and collectivism in an Australian Aboriginal context. In: McIntyre-Mills J, Romm N, Corcoran-Nantes Y, eds. Balancing Individualism and Collectivism: Springer 2018:199-209.
 - 29. Murphy M. Self-determination as a collective capability: The case of Indigenous peoples. Journal of Human Development and Capabilities 2014;15(4):320-34.
 - 30. Ibrahim SS. From individual to collective capabilities: The capability approach as a conceptual framework for self-help. *Journal of Human Development* 2006;7(3):397-416.
 - 31. Sangha KK, Le Brocque A, Costanza R, et al. Application of capability approach to assess the role of ecosystem services in the well-being of Indigenous Australians. *Global Ecology and Conservation* 2015;4:445-58.
 - 32. Squires JE, Graham ID, Hutchinson AM, et al. Understanding context in knowledge translation: A concept analysis study protocol. *Journal of Advanced Nursing* 2015;71(5):1146-55.
 - 33. Ramsay S, Boddy J. Environmental social work: A concept analysis. *The British Journal of Social Work* 2017;47(1):68-86.
 - 34. Hurst SK, Dotson JAW, Butterfield P, et al. Stigma resulting from head lice infestation: A concept analysis and implications for public health. *Nursing Forum* 2020;55(2):252-58.
 - 35. Hughes M, Duffy C. Public involvement in health and social sciences research: A concept analysis. *Health Expectations* 2018;21(6):1183-90.
 - 36. Rodgers BL. Exploring health policy as a concept. *Western Journal of Nursing Research* 1989;11(6):694-702.
 - 37. Tofthagen R, Fagerstrøm LM. Rodgers' evolutionary concept analysis—a valid method for developing knowledge in nursing science. *Scandinavian Journal of Caring Sciences* 2010;24:21-31.

- 38. Morse JM, Hupcey JE, Mitcham C, et al. Concept analysis in nursing research: A critical appraisal. *Scholarly Inquiry for Nursing Practice* 1996;10(3):253-77.
 - 39. The University of Melbourne. Charter for research with Indigenous knowledge holders 2017 [Available from:

 https://indigenousknowledge.unimelb.edu.au/support/charter-for-research-with-indigenous-knowledge-holders] accessed 7 June 2021.
 - 40. Sherriff N, Hall V, Panton C. Engaging and supporting fathers to promote breast feeding: A concept analysis. *Midwifery* 2014;30(6):667-77.
 - 41. Bessarab D, Ng'andu B. Yarning about yarning as a legitimate method in Indigenous research. *International Journal of Critical Indigenous Studies* 2010;3(1):37-50.
 - 42. Kovach M. Conversation method in Indigenous research. First peoples child & family review: An interdisciplinary journal honouring the voices, perspectives, and knowledges of first peoples through research, critical analyses, stories, standpoints and media reviews 2010;5(1):40-48.
 - 43. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. *Field Methods* 2006;18(1):59-82.
 - 44. Charmaz K. Constructing grounded theory: A practical guide through qualitative analysis: Sage 2006.
 - 45. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qualitative Health Research* 2005;15(9):1277-88.
 - 46. Thomas DR. A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation* 2006;27(2):237-46.
 - 47. Mengesha MM, Ajema D, Teshome A, et al. The association between diagnosis disclosure and adherence to antiretroviral therapy among adolescents living with HIV in sub-Saharan Africa: A protocol for systematic review and meta-analysis.

 Systematic reviews 2020;9(1):1-5.
 - 48. Haslam SA, McGarty C. Research methods and statistics in psychology. London: Sage Publications 2014:xi-520.
 - 49. McAlister A, Lee D, Ehlert K, et al. Qualitative coding: An approach to assess inter-rater reliability. 2017 American Society for Engineering Education Annual Conference and Exposition. Columbus, Ohio, 2017:5-9.
 - 50. Singleton KJ, Neuber KS. Examining how students with visual impairments navigate accessible documents. *Journal of Visual Impairment & Blindness* 2020;114(5):393-405.
 - 51. Simonds VW, Christopher S. Adapting western research methods to Indigenous ways of knowing. *American Journal of Public Health* 2013;103(12):2185-92.
 - 52. Ninomiya MEM, Atkinson D, Brascoupé S, et al. Effective knowledge translation approaches and practices in Indigenous health research: A systematic review protocol. *Systematic Reviews* 2017;6(1):1-7.
 - 53. Harfield S, Gibson O, Morey KA, et al. The CREATE critical appraisal tool: Establishing the validity, reliability and feasibility of a tool to appraise research from Aboriginal and Torres Strait Islander perspective. *BMC Medical Research Methodology* 2017
 - 54. United Nations General Assembly. United Nations Declaration on the Rights of Indigenous Peoples, 2008.
 - 55. Australian Institute of Aboriginal and Torres Strait Islander Studies. AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research. Canberra, 2020.

Step 1. Qualitative interviews *

In-depth interviews with knowledge holders will occur in the first instance. A conventional content analysis and general inductive approach will be applied to analyse the data. The findings will inform the search strategy (Step 3) and inclusion criteria of the concept analysis of the literature.

Step 2. Develop search strategy

Compile the associated terms, as identified by the knowledge holders (Step 1) to develop a search strategy. This includes terms that share similar expressions and synergies with collective capability. New terms may be identified; as new associated terms may be revealed during the literature search. The context in which collective capability is used will also be identified.

Step 3. The search

Search the literature using the search strategy, and the inclusion and exclusion criteria. All databases to be accessed will be included, and disciplines chosen for the inclusion of the study. MeSH terms and subject headings will be used in each database. An extensive spectrum of databases and sources will be included.

Step 4. Data extraction and synthesis

Analyse and synthesise the data from the literature to identify characteristics of collective capability, as conceptualised and described by the knowledge holders in the in-depth interviews, and any new characteristics that may emerge from the literature.

Step 5. Consensus *

The two team members will meet to discuss the review and assessment of the literature.

Step 6. Examples

If appropriate, a model case or exemplar of collective capability in an Indigenous evaluation context from the literature will be identified.

Step 7. Implications

Findings will be shared with the project advisory group and Thiitu Tharrmay governance groups, and other stakeholders. Implications and further research will be established.

^{*}Modified components of Rogers' evolutionary method

Supplementary file: Interview guide with knowledge holders using yarning

The list of interview questions in the manuscript form the interview guide. We intend to adopt yarning as a conversation method, to share and exchange knowledge and experiences between the interviewer and the participant (knowledge holder). The questions are semi-structured and will act as the conversation starter for the yarning. This allows for a deeper understanding of how the participant perceives the topic discussed, and for rapport to be built throughout the interview process to address our aim of defining collective capability. The questions include:

- a. Can I ask you why you said yes to this interview?
- b. What words come to mind when you hear the word evaluation?
 - i. What do you think Indigenous evaluation is?

The researcher may start to dig deeper into some of the characteristics that are being discussed by the knowledge holder and to draw out how Indigenous evaluation differs from standard evaluation.

ii. Probing questions: Can you tell me a bit more about your experience (term, or the words the participant has mentioned)

The researcher is wanting to draw out terms that the knowledge holder identifies with their experiences of evaluation, to understand how Indigenous evaluation is realised in practice.

c. What is important in Indigenous evaluation?

The researcher could come back to the characteristics of Indigenous evaluation mentioned earlier to draw out structures and processes that be important to the characteristics. In particular, to unpack how these look from a practical perspective, and how they might inform decision making.

- d. What does the word collective mean to you?
 - i. Probing question: What other words represent collective?

The researcher could draw on how they relate to the term and where they've noticed the term being discussed in other subject areas such as leadership and governance for Indigenous peoples. The researcher could also unpack where the knowledge holder has seen collective arrangements take place in different settings.

- ii. Probing question: How would you explain collective to other people?
- e. What words come to mind when you hear the word capability?
 - i. Probing question: What other words represent capability?

The researcher can draw out the difference between capacity and capability. Coming back to particular characteristics of Indigenous evaluation mentioned earlier, the researcher could direct the yarn to what things might be recognised or acknowledged as assets or strengths for Aboriginal and Torres Strait Islander people to move towards self-determined evaluation practice.

ii. Probing question: How would you explain capability to other people?

The researcher can explore with the knowledge holder what other words could be used to talk about what they mean by capability, and to share some examples that maybe apply to evaluation, decision making or leadership.

- f. If we brought the words collective and capability together, how would you explain collective capability to other people?
 - i. Probing question: What other words would you use to explain collective capability?

The researcher could ask what is not collective capability?

ii. Probing question: I've bought along these images along today, do any of these resonate collective capability, and can you tell me why? (there will be approximately six abstract images. No identifying of people or places)

The research could ask the knowledge holder to identify images that do not reflect collective capability as a way for the knowledge holder to talk about what is collective capability.

g. How would you explain collective capability in Indigenous evaluation?

The researcher could refer to similar terms they've heard about, such as capacity building used in community development and health promotion relating to Aboriginal and Torres Strait Islander people. The researcher could ask the knowledge holder if they see similarities between these two terms and are there notable differences between them. Also seek to see what we see as a result of the terms that are known or used more frequently.

i. Probing question: Do you think it happens now in Indigenous evaluation?

The researcher can come back to the knowledge holder identifying that Indigenous evaluation has particular characteristics and draw out if they think collective capability helps or compliments these.

- ii. Probing question: What would you see if collective capability was applied to Indigenous evaluation?
- iii. Probing question: How would things be different if collective capability was happening now, like you described?

The researcher could explore if we were to embed collective capability into the way we do evaluations, how would the knowledge holder enhance Aboriginal and Torres Strait Islander involvement in evaluation. Also explore with the knowledge holders what other supports would be needed for this to happen, and what do they see the role of non-Indigenous evaluators play for collective capability to be realised in practice.